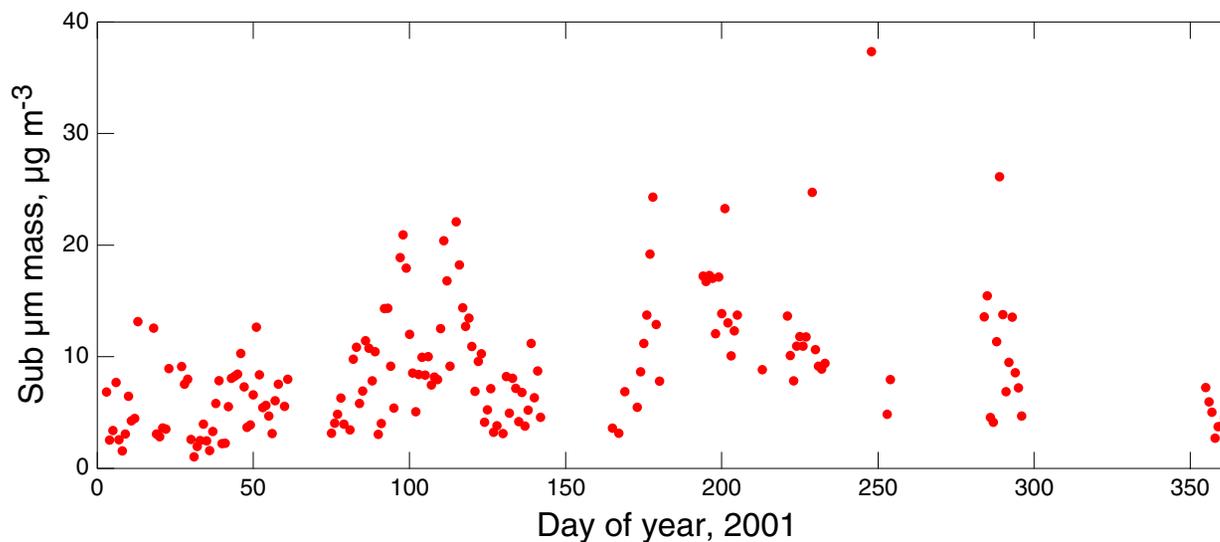
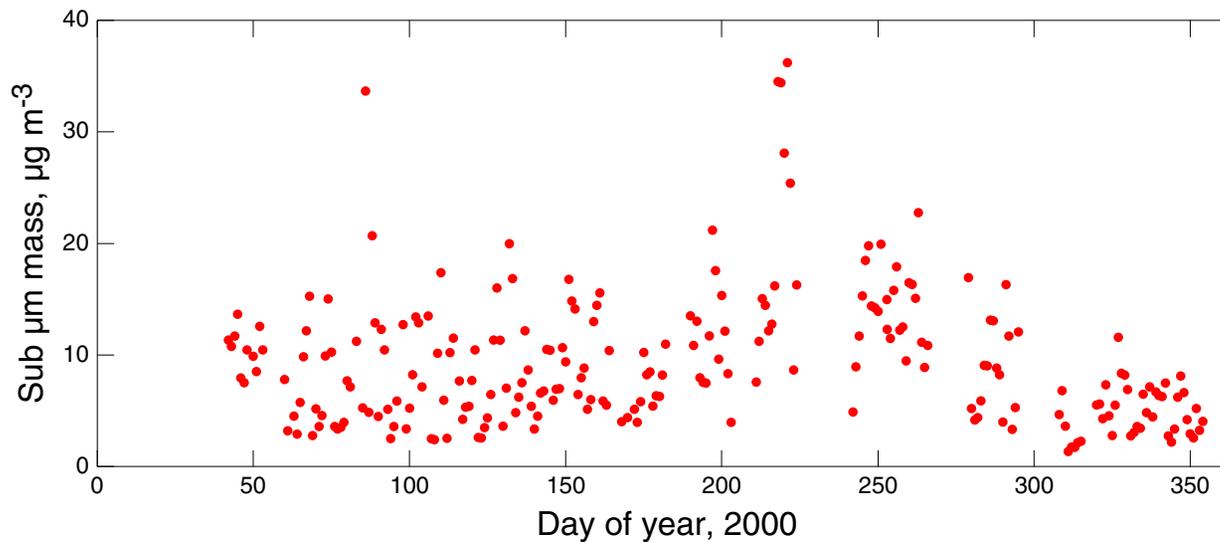


# AEROSOL MASS LOADING AT SGP

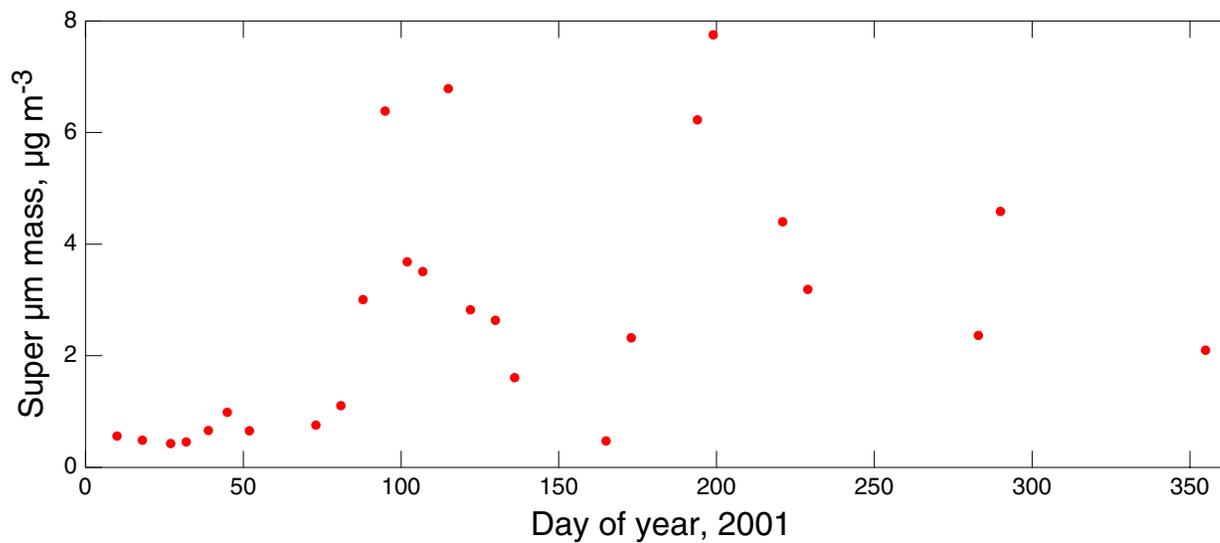
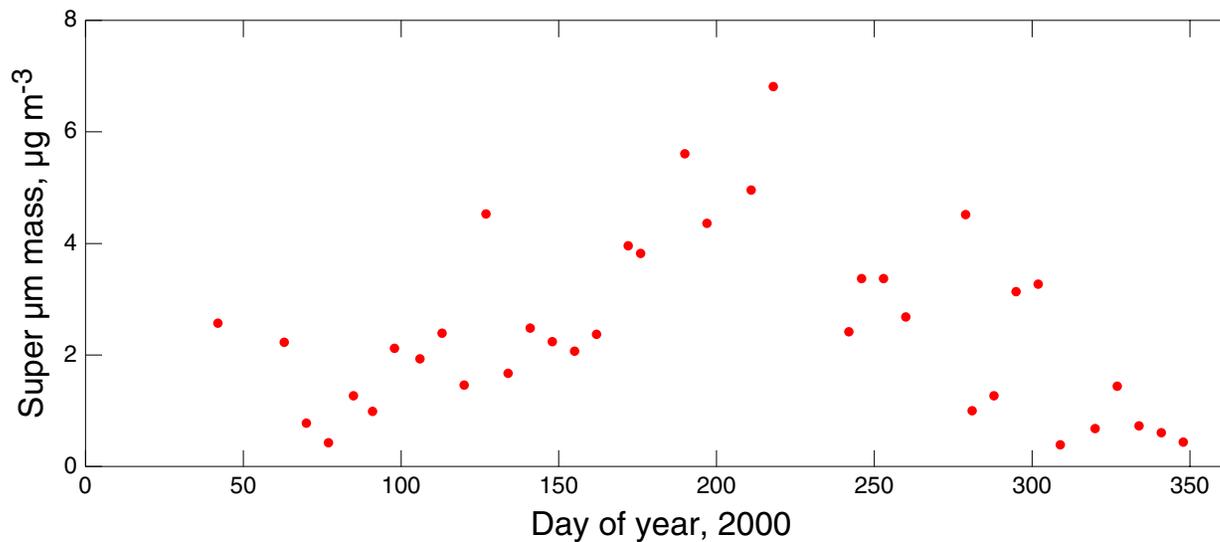
Submicrometer Diameter at 40% RH, 24-hour Sampling



*Trish Quinn, quinn@pmel.noaa.gov*

# AEROSOL MASS LOADING AT SGP

Supermicrometer Diameter at 40% RH, 7-Day Sampling



Trish Quinn, [quinn@pmel.noaa.gov](mailto:quinn@pmel.noaa.gov)

## Data available from

[http://iop.archive.arm.gov/arm-iop/0special-data/ogren-aos/chemical\\_analysis/](http://iop.archive.arm.gov/arm-iop/0special-data/ogren-aos/chemical_analysis/)

## Here is the README file associated with these data

NOAA PMEL Station Chemistry Data

Contact person: Trish Quinn, quinn@pmel.noaa.gov

Station ID

SGP = Southern Great Plains ARM Site

Submicron samples are collected on a daily basis and

Supermicron samples are collected on a weekly basis.

The submicron - supermicron split is made with a Berner-type cascade impactor having a D50,aero of 1.0 um at the RH of the sample stream.

Hence, the submicron data is for particle sizes < 1.0 um and the supermicron data is for particle sizes > 1.0 um and < 10 um. The RH of the sampled aerosol is < 40% at all stations.

Samples are analyzed by ion chromatography for Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, SO<sub>4</sub><sup>-2</sup>, Na<sup>+</sup>, NH<sub>4</sub><sup>+</sup>, K<sup>+</sup>, Mg<sup>2+</sup>, and Ca<sup>2+</sup>.

Samples also are analyzed for total mass by gravimetric analysis at 55 +/- 5% RH.

All ion and mass concentrations are given as ug/m<sup>3</sup> at STP.

More details of the sampling and analysis methods can be found in

Quinn et al., J. Geophys. Res., 105, 6785 - 6805, 2000.

There are two separate files of data for each station: one for submicron data and one for supermicron data.

Flags used in the files are:

V = Volume zero or unknown.

NS = Filter not sampled.

BDL = Below detection limit.

NA = Data not available.

Filters 2 through 8 = submicron filter.

Filter S = supermicron filter.